

which it occurs, sparing no labour to ensure complete accuracy, the reliability of the geological portion of the present paper is entirely due.

To the kindly criticism of my friend and colleague Professor T. Rupert Jones, F.R.S., during the course of my work, I owe a good deal; and it is no small thing that in the results, as detailed in the foregoing pages, I have the entire concurrence of one who has contributed so much to place the classification and nomenclature of the genus *Nummulina* on an intelligible basis.

EXPLANATION OF PLATE XII.

- Fig. 1* represents the lateral aspect, *fig. 2* the periphero-lateral aspect of *Nummulina pristina*, magnified 50 diameters. Except a very trifling portion of the last convolution (which is broken away), this specimen is quite perfect.
- Fig. 3* is a very accurate drawing of a transverse section, almost entire, magnified 100 diameters. It shows the somewhat large primordial chamber, the investing character of the alar lobes of the chambers of the spire, and the lamination of the test arising therefrom. The general tubulation of the shell is well seen; and at the lower end of the drawing indications of the marginal cord may be distinctly traced, though wanting in definition.
- Fig. 4* is from a specimen accidentally split at the median plane, magnified 50 diameters; one of several, more or less perfect, found in this condition. The tendency to split horizontally at the median line is of itself a Nummuline peculiarity of some significance.
- Fig. 5* shows a small portion of a horizontal section, much more highly magnified (200 diameters), the object being to demonstrate the existence of a canal-system in the septa and peripheral region. More difficulty has been experienced in obtaining good horizontal sections than transverse; this, however, has been sufficient to yield to Mr. Hollick (who has drawn direct from the object) very characteristic details of structure at one point in the peripheral convolution.

XXXII.—Notice of some new Species of Fishes from Morocco.

By Dr. ALBERT GÜNTHER, F.R.S., Foreign Member of the Senckenberg Society of Frankfort.

[Plates XIII. & XIV.]

A SMALL collection of marine and freshwater fishes, made by Dr. Rein and Dr. C. von Fritsch during their journey in Morocco, was placed by the former gentleman in my hands for examination. It contained four new species, which may be characterized as follows:—

Serranus atricauda.

D. $\frac{10}{15}$. A. $\frac{3}{8}$. L. lat. 115.

I am unable to identify a specimen from Mogador with any

of the species described as being allied to *Serranus cabrilla* or *Serranus scriba*, the scales being considerably smaller than in any of those species. There are eleven scales in a transverse series between the dorsal fin and the lateral line. The height of the body is two sevenths of the total length (without caudal), the length of the head one third. Snout scaleless, pointed, with the lower jaw slightly prominent, the maxillary extending beyond the vertical from the middle of the eye. The diameter of the eye is two ninths of the length of the head and two thirds of that of the snout. Interorbital space flat, much less than the diameter of the eye. The serrature round the angle of the præoperculum is much coarser than on the remainder of the bone. The fourth, fifth, and sixth dorsal spines are the longest. Ventral fin terminating at a great distance from the vent; caudal truncated. Reddish olive (in spirit), with several dark cross bands, most distinct in the middle of the side of the body; two of them are darker and broader than the rest, and occupy the middle of the body. An oblique dark streak from the eye to the angle of the præoperculum. The soft vertical fins with numerous very small bluish ocelli. Corners of the caudal fin deep black.

I find that the specimen from Mogador is identical with others in the British Museum from the Azores, Madeira, and the Canary Islands (Teneriffe) which I have hitherto confounded with *S. cabrilla*.

Barbus Reinii. Pl. XIII.

D. 11. A. 8. L. lat. 32. L. transv. 5/6.

The osseous dorsal ray is strong, smooth, its stiff portion being two thirds as long as the head. There are two and a half or three series of scales between the lateral line and the root of the ventral fin. The height of the body is a little more than the length of the head, which is one fourth of the total (without caudal). Snout moderately produced, obtusely conical. Mouth inferior; lips not thickened; barbels longer than the eye. The origin of the dorsal fin is distinctly in front of the root of the ventral, and nearly midway between the end of the snout and the root of the caudal. Caudal fin deeply forked. Coloration uniform.

This species inhabits the river Tensift. The largest of the three specimens examined is $8\frac{1}{2}$ inches long.

Barbus Fritschii. Pl. XIV. fig. A.

D. 11. A. 9. L. lat. 32-33. L. transv. $5\frac{1}{5}$.

The osseous dorsal ray is feeble, not much stronger than the

others, and not serrated. There are two and a half longitudinal series of scales between the lateral line and the root of the ventral. The height of the body is contained thrice and one fourth in the total length (without caudal), the length of the head four times. Snout short and obtuse, with the mouth inferior, broad, short, and crescent-shaped; the lower jaw with rather a sharp margin. Barbels four, short. The diameter of the eye equals the length of the snout, and is two sevenths of that of the head. Origin of the dorsal fin nearly midway between the end of the snout and the root of the caudal, opposite to the base of the ventral. Anterior anal rays very long, extending beyond the root of the caudal. A more or less distinct narrow greyish longitudinal band runs from the back part of the eye above the lateral line to the middle of the caudal fin, and separates the darker coloration of the back from the silvery of the belly.

This is a small species, apparently abundant in the streams near Morocco (Oued Ksib). The largest specimen is only $4\frac{1}{2}$ inches long.

Barbus nasus. Pl. XIV. fig. B.

D. 11. A. 8. L. lat. 45. L. transv. 9/10.

Osseous dorsal ray strong, strongly serrated. There are five longitudinal series of scales between the lateral line and the ventral fin. The length of the head is rather more than the height of the body, and one fourth of the total (without caudal). Snout very long, much pointed, as long as the postorbital portion of the head; lips very thick, the lower with the fold interrupted in the middle; mouth inferior; barbels very fleshy and much longer than the eye, which is small. The base of the ventral fin is conspicuously in advance of the origin of the dorsal fin, which is nearly equidistant between the end of the snout and the root of the caudal. Anal fin not very narrow, none of the rays extending to the caudal. Caudal deeply forked. Coloration uniform.

The larger of the two specimens sent is $5\frac{1}{2}$ inches long. They bear the number 39; and on referring to the corresponding number in the list of localities I find that the specimens are said to have been obtained, with other marine fish, on the sea-shore near Mogador; I cannot help thinking that some mistake has taken place, and that these specimens were obtained from fresh water, like the other species of this genus.